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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/706,177

Applicant(s)

BOU-GHANNAM ET AL.

Examiner

Jennifer N. To

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-38 are pending for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shim (U.S. Publication No. 2001/0020249), and in view of Xie et al. (hereafter Xie) (U.S. Publication No. 2004/0068586).

4. Shim and Xie were cited in the previous office action.

5. As to claim 25, Shim teaches the invention substantially as claim including a system for resolving conflicts between competing Web services comprising:

means for reading an execution list of service activation rules corresponding to watchers, wherein each watcher is configured to invoke an associated Web service (page 1, [0008], lines 5-7, the agent module contains the watchers),

means for identifying service activation rules in the execution list corresponding to competitive Web services (page 1, [0008], lines 5-7, the agent module receives and

analyzes user commands, so the agent module is able to identify the server activation rules), and

means for invoking watchers specified by the identified service activation rules according to said means for comparing (page 1, [0008], lines 5-7, the agent module also performs operations according the results of the analysis of the commands, implying that tasks associated with the matching rules are invoked and that these tasks invoke the appropriate Web service. The tasks are the watchers).

6. Shim does not disclose means for comparing the identified service activation rules with at least one service selection rule.

7. However, Xie discloses means for comparing the identified service activation rules with at least one service selection rule (page 6, [0070], lines 10-13).

8. It would have been obvious to a person having ordinary skill in the art at the time of invention having the teachings of Shin and Xie before him or her to incorporate the service selection rule feature of Xie in the system of Shim, allowing the user to specify preferred Web services to employ.

9. Claim 13, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shim (U.S. Publication No. 2001/0020249), and in view of Flockhart et al. (hereafter Flockhart) (U.S. Patent No. 6732188).

10. Shim was cited in the previous office action.

11. As per claim 13, Shim teaches the invention substantially as claim including a method for resolving conflicts between competing Web services comprising:

reading an execution list of service activation rules corresponding to watchers (page 1, [0008], lines 5-7, the service activation rules are read from the execution list to invoke the watchers, ultimately to invoke the Web services),

identifying service activation rules in the execution list corresponding to competitive Web services (page 1, [0008], lines 5-7, the agent module receives and analyzes user commands, so the agent module is able to identify the server activation rules), and

invoking watchers specified by the identified service activation rules according to said comparing step (page 1, [0008], lines 5-7, the agent module also performs operations according the results of the analysis of the commands, implying that tasks associated with the matching rules are invoked and that these tasks invoke the appropriate Web service. The tasks are the watchers).

12. Shim does not disclose that the service activation rules in the execution list correspond to competitive Web services, comparing the identified service activation rules with at least one service selection rule, and wherein the at least one selection rule comprises a heuristic evaluation of the competitive Web services.

13. However, Flockhart teaches the service activation rules in the execution list correspond to competitive Web services, comparing the identified service activation rules with at least one service selection rule, and wherein the at least one selection rule comprises a heuristic evaluation of the competitive Web services (col. 2, lines 30-41; col. 5, lines 60-63; col. 6, lines 8, 16, 19, 26, 37, 49; col. 7, line 1 through col. 8, lines 4; col. 8, lines 36-52).

14. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Shim and Flockhart because Flockhart teaching of the service activation rules in the execution list correspond to competitive Web services, comparing the identified service activation rules with at least one service selection rule, and wherein the at least one selection rule comprises a heuristic evaluation of the competitive Web services would improved the integrity of Shim's system by providing more appropriate customer treatment for internet service request (col. 2, lines 44-47).

15. As per claim 38, it is a program product corresponding to claim 13. Therefore, it is rejected for the same reason as claim 13 above.

16. Claims 1-11, 14-16, 19, 20, 23, and 26-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shim (US 2001/0020249), in view of Auer et al. (hereafter Auer) (US 6,067,637), and further in view of Wu (US 2005/0038708).

17. Shim, Auer, and Wu were cited in the previous office action.

18. As per claim 1, Shim teaches the invention substantially as claim including a method of scheduling a request for a plurality of Web services comprising the step of:

(a) providing a plurality of service activation rules for causing a watcher to invoke a particular Web service (Abstract, lines 1-8, the Web services are scheduled based on the analysis of the user commands, which implies service activation rules and a watcher that is able to determine when to invoke a particular Web service).

19. However, Shim does not disclose "each service activation rule specifying trigger and state conditions", nor does Shim disclose steps (b) through (f). On the other hand, Auer discloses that each server activation rule specifies trigger and state conditions (col. 6, lines 49-51).

20. Auer teaches the method comprises:

(b) receiving at least one event indicating a change in a common memory, wherein each event specifies trigger information (Abstract, lines 8-11, the event trigger filters data when data is sent over the communications link. Col. 5, lines 66-67, col. 6, lines 1-4, data is sent from the remote system when modifications are made to the remote screen i.e., remote screen memory (Although the remote screen memory is not a common memory, whether or not the screen memory is in a common memory or not is not critical to the operability of the system of Auer, see claim 8). The event specifies

trigger information, since a processor compares the match portion of at least one of the event triggers, see Abstract, lines 11-12),

(c) comparing the trigger conditions of the service activation rules with the trigger information of the at least one event (Abstract, lines 11-12),

(d) adding service activation rules that match the at least one event to a trigger list (col. 2, lines 27-30),

(e) comparing the state conditions of service activation rules in the trigger list with a state of the common memory (col. 6, lines 38-41, the "pattern portion" corresponds to the state condition of the rule, col. 6 lines 49-51), and

(f) selecting the service activation rules of the trigger list that match the state of the common memory (col. 6, lines 51-52, the action portion of the rule is executed).

21. It would have been obvious to a person having ordinary skill in the art at the time of invention having the teachings of Shim and Auer before him or her to incorporate the form of the rules used by Auer in the system of Shim, to incorporate the indication of an event when a change in a common memory occurs, and to incorporate the comparison of the trigger conditions of the service activation rules with the trigger information of the event(s), to incorporate the comparison of state conditions of the service activation rules in the trigger list with a state of the common memory, and to incorporate the selection of service activation rules of the trigger list that match the state of the common memory. The motivation for doing so would

have been to enable the rules to specify the conditions that the rules-based system would respond to based on the contents of a working memory as taught by Auer (col. 6, lines 49-51), and to allow the system to execute the action portion of the rule as taught by Auer (Abstract, lines 11-14), and to allow a second comparison to be used in the rule matching process as taught by Auer (col. 6, lines 49-54).

22. Neither Shim nor Auer disclose that selecting the service activation rules of the trigger list that match the state of the common memory causes the invocation of at least one watcher and corresponding Web service. However, in the combined system of Shim and Auer the invocation of a watcher and corresponding Web service will result from the agent module performing commands based on analyzing the user commands (Shim, paragraph [0008], lines 5-7).

23. Neither Shim nor Auer discloses that the state of the common memory is dictated by at least one pattern object. However, Wu discloses that the state of the common memory is dictated by at least one pattern object (paragraph [0046], for each user submission concurrency configurations are saved,, so data is written to memory in the form of a pattern object, also see paragraph [0019], first sentence).

24. It would have been obvious to a person having ordinary skill in the art at the time of invention having the teachings of Shim and Auer, and the teachings of Wu before him or her to write data to memory in the form of a pattern object, i.e., have at

least one pattern object dictate the state of the common memory. The motivation for doing so would have been to keep the data in memory organized which, in turn, makes it easier to work with the data.

25. As per claim 2, neither Shim, Auer, nor Wu specifically disclose the method of claim 1, wherein each event indicating a change in the common memory is associated with the pattern object. However, it would have been obvious to one skilled in the art at the time of invention that an event indicating a change in the common memory is associated with the pattern object, since the data in memory is written in the form of pattern objects.

26. As per claim 3, neither Shim, Auer, nor Wu specifically disclose the method of claim 1, said step (e) further comprising the step of adding service activation rules of the trigger list that match the pattern object to an executable list, wherein each service activation rule in the executable list is executed in said step (f). However, It would have been obvious to one skilled in the art at the time of invention to put the service activation rules of the tasks to be executed in an executable list in order to track the Web services that are being invoked.

27. As per claim 4, it is rejected for the same reasons as claim 1 above. In addition, Auer discloses the method of claim 1, further comprising the steps of:

at least one of the watchers modifying the common memory (col. 1, lines 51-55, the event triggers update the working memory), the common memory sending at least one event indicating a state change (col. 5, lines 66-67, col. 6, lines 1-4, data is sent over the communications link specifying that data in the screen memory has changed), wherein each event specifies a trigger condition (col. 1, lines 48-56, the event triggers examine the data sent over the communications link to see if it matches the trigger condition of one of the rules, so the information sent over the communications link comprises trigger conditions), and repeating said steps (b)-(f) (col. 1, lines 39-43, the steps are repeated each time data is sent over the communications link).

28. As per claim 5, Wu teaches that wherein the at least one of the watchers modifies the common memory according to instructions from an associated one of the Web services (paragraph [0024], the invention dynamically reconfigures Web services by intercepting, transforming, and redirecting SOAP messages, and the SOAP messages are in memory).

29. As per claim 6, Wu teaches that wherein at least one of the watchers modifies the common memory by modifying the pattern object (paragraph [0024], the invention dynamically reconfigures Web services by intercepting, transforming, and redirecting SOAP messages, and the SOAP messages are in memory).

30. As per claim 7, Wu teaches that wherein each pattern object specifies at least two Web services to be performed (page 2, [0023], when the invention is

configured as a Web services tester, the number of invocations per thread is set to be more than one. This is interpreted as meaning that there are more than one Web services to be performed for the given thread and that the corresponding pattern object will specify at least two Web services).

31. As per claim 8, Wu teaches that wherein at least two watchers each invoke an associated Web service to operate concurrently with one another in said step (f) (paragraph [0037], lines 1-7, concurrent Web Services invocation requests are described).

32. As per claim 9, Wu teaches that wherein at least two watchers each invoke an associated Web service to operate sequentially in said step (f) (paragraph, [0082], invoking one of the Web services is described, especially, "the sequence in the invocation list dictate what operations are to be invoked and what the invocation sequence is").

33. As per claim 10, Wu teaches watchers continuing to invoke Web services until a termination watcher is activated and removes the pattern object from the common memory (page 3, [0046], the queue watcher removes the request from the queue, also see Figure 6).

34. As per claim 11, Wu teaches at least one of the watchers modifying the pattern object according to instructions from an associated one of the Web services (page 2, [0024], the invention dynamically reconfigures Web services by intercepting, transforming, and redirecting SOAP messages).

35. As to claim 14, Shim teaches the invention substantially as claim including a system for processing complex requests for Web services comprising:

a plurality of service activation rules (Abstract, lines 1-8, service activation rules are necessary for the user commands to be analyzed),

a server configured to receive a request for more than one Web service (paragraph [0007], lines 1-3, multiple Internet services are provided, a service is inherent for the system to receive and process user requests for Internet services),

a plurality of watchers, each watcher corresponding to a particular Web service (Abstract, lines 11-14, the watchers are contained within the service automation module), where the service activation rules cause the invocation of at least one of said watchers and corresponding Web services (Abstract, lines 1-8, the Web services are scheduled based on the analysis of the user command, so there are service activation rules and watchers that are able to determine when to invoke a particular Web service), and

a scheduler to receive events (paragraph [0039], lines 8-10, the agent scheduler receives a command signal, which is the event).

36. Shim does not disclose that the scheduler compares trigger conditions specified by said service activation rules with trigger information of events, compares state conditions of said service activation rules in the trigger list with a state of the common memory, and selects at least one of said service activation rules, each service activation rule specifying a trigger condition and a state condition for causing a watcher to invoke a particular Web service.

37. However, Auer discloses that the scheduler compares trigger conditions specified by said service activation rules with trigger information of events (Abstract, lines 11-12), compares state conditions of said service activation rules in the trigger list with a state of the common memory (col. 6, lines 38-41, the "pattern portion" corresponds to the state condition of the rule, col. 6, lines 49-51), and selects at least one of said service activation rules (col. 6, lines 51-52), each service activation rule specifying a trigger condition and a state condition (col. 6, lines 49-51).

38. It would have been obvious to a person having ordinary skill in the art at the time of invention having the teachings of Shim and Auer before him or her to incorporate comparisons of trigger and state conditions when deciding which Web services to invoke. The motivation for doing so would have been to allow more granularity in the selection process by using a secondary comparison in the rule matching as taught by Auer (col. 6, lines 49-54).

39. Neither Shim nor Auer discloses at least one servlet configured to extract a pattern object from the request and to format a response to the request, and a common memory that temporarily stores the pattern object while the Web services specified by the pattern object execute.

40. However, Wu discloses at least one servlet configured to extract a pattern object from the request (page 3, [0042], line 3, "the system parses the form data") and to format a response to the request (page 1, [0016], the system constructs SOAP response messages). Wu further discloses a common memory that temporarily stores the pattern object while the Web services specified by the pattern object execute (page 3, [0052], the system looks up the previous invocation object, which indicates that an object representing a user request is temporarily stored in memory).

41. It would have been obvious to a person having ordinary skill in the art at the time of invention was made having the teachings of Shim, Auer and Wu before him or her to incorporate a service to extract a pattern object from the request and format a response to the request, and to temporarily store the pattern object while the Web services specified by the pattern object. The motivation for doing so would have been to enable a SOAP message response containing request information to be sent to a JSP page or a log file, and to allow the invocation request to be cloned if a

user wants to invoke a previously invoked Web service (Wu, paragraph [0050], paragraph [0052]).

42. As per claim 15, Wu teaches termination watcher configured to provide the pattern object back to one of said plurality of servlets to generate a response (page 3, [0046], the queue watcher spurs the client thread, i.e., servlet, after removing the pattern object from the queue, passing the pattern object to the client thread which generates a response, i.e., spurs invocation thread as per configuration, see Fig. 6, #618, #628, and #638).

43. As per claim 16, Wu teaches that wherein said watchers are further configured to modify the pattern object according to instructions provided from an associated one of the Web services (page 2, [0024], the invention dynamically reconfigures Web services by intercepting, transforming, and redirecting SOAP messages, and the SOAP messages are in memory).

44. As per claim 19, Shim teaches the invention substantially as claim including a system for processing complex requests for Web services comprising:

a plurality of service activation rules for causing a watcher to invoke a particular Web service (Abstract, lines 1-8, the Web services are scheduled based on the analysis of the user commands, which implies service activation rules and a watcher that is able to determine when to invoke a particular Web service).

45. Shim does not disclose that each service activation rule specifies a trigger condition and a state condition, nor that said common memory generates events when the content of said common memory is changed, nor does Shim disclose a trigger evaluation processor configured to compare the trigger conditions of the service activation rules with trigger information from at least one event.

46. However, Auer discloses that each service activation rule specifies a trigger condition and a state condition (col. 6, lines 49-51), and that said common memory generates events when the content of said common memory is changed (col. 5, lines 66-67, col. 6, lines 1-4, data is sent from the remote system when modifications are made to the remote screen, i.e., remote screen memory). In addition Auer teaches a trigger evaluation processor configured to compare the trigger conditions of the service activation rules with trigger information from at least one event (Abstract, lines 11-12, the processor is inherent in the system), that the trigger evaluation processor adds service activation rules that match the at least one event to a trigger list (col. 2, lines 27-30, the processor is inherent in the system), and a state evaluation processor configured to compare the state conditions of service activation rules in the trigger list with a state of the common memory (col. 6, lines 38-41, the "pattern portion" corresponds to the state condition of the rule, col. 6 lines 49-51) and cause the service activation rules of the trigger list that match to be selected (col. 6, lines 51-52, the action portion of the rule is executed).

47. It would have been obvious to a person having ordinary skill in the art at the time of invention having the teachings of Shim and Auer before him or her to incorporate the form of the rules used by Auer in the system of Shim, to have the common memory generates events when the content of said common memory is changed, to have a trigger evaluation processor configured to compare the trigger conditions of the service activation rules with trigger information from at least one event, and to add service activation rules that match event(s) to a trigger list. The motivation for doing so would have been to enable the rules to specify the conditions that the rules-based system would respond to based on the contents of a working memory (Auer, col. 6, lines 49-51), to allow the system to execute the action portion of the rule (Auer, Abstract, lines 11-14), and to enable comparisons to be carried out (Auer, col. 2, lines 27-30 describes the comparisons).

48. Although Auer does not disclose that the state evaluation processor is configured to cause the invocation of at least one watcher and corresponding Web service when a match occurs, Auer discloses that the "action" part of the rule is invoked (Abstract, lines 11-14), and in the combined system, the "action" part of the rules are watchers that invoke a particular Web service.

49. Neither Shim nor Auer disclose a common memory that temporarily stores a pattern object while Web services specified by the pattern object execute. However, Wu discloses a common memory that temporarily stores a pattern object while Web

services specified by the pattern object execute (paragraph [0052], the system looks up the previous invocation object, which indicates that an object representing a user request is temporarily stored in memory).

50. It would have been obvious to a person having ordinary skill in the art at the time of invention having the teachings of Shim, Auer and Wu before him or her to temporarily store the pattern object while the Web services specified by the pattern object execute in order to allow the invocation request to be cloned if a user wants to invoke a previously invoked Web service (paragraph [0050], paragraph [0052]).

51. As to claim 20, neither Shim, Auer, nor Wu discloses the system of claim 19, wherein said state evaluation processor adds the service activation rules of the trigger list that match the at least one pattern object to an execution list prior to execution of each service activation rule. However, it would have been obvious to one skilled in the art at the time of invention to add the activation rules that match the pattern object to an executable list in order to track the Web services that are being invoked.

52. As per claim 23, it is system claim corresponding to claim 1. Therefore, it is rejected for the same reason as claim 1 above.

53. As per claims 26-36, they are computer program corresponding to claims 1-11. Therefore, they are rejected for the same reason as claims 1-11 above.

54. Claims 12, 17, 18, 21, 22, 24, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 2001/0020249), in view of Auer et al. (hereafter Auer) (US 6,067,637), in view of Wu (US 2005/0038708), as applied to claims 1, 14, 19, 23, and 26 above, and further in view Flockhart et al. (hereafter Flockhart) (U.S. Patent No. 6732188).

55. Shim, Auer, and Wu were cited in the previous office action.

56. As per claim 12, the combination of Shim, Auer, and Wu teaches the invention substantially as claimed in claim 1. In addition, Shim further teaches identifying service activation rules in the execution list corresponding to competitive Web services (page 1, [0008], lines 5-7, the agent module receives and analyzes user command, so the agent module is able to identify the server activation rules), and invoking watchers specified by the identified service activation rules according to said comparing step (page 1, [0008], lines 5-7, the agent module also performs operations according to the commands).

57. The combination of Shim, Auer, and Wu did not specifically teach the step of comparing the identified service activation rules with at least one service selection rule, wherein the at least one selection rule comprises a heuristic evaluation of the competitive Web services.

58. However, Flockhart teaches comparing the identified service activation rules with at least one service selection rule, and wherein the at least one selection rule comprises a heuristic evaluation of the competitive Web services (col. 2, lines 30-41; col. 5, lines 60-63; col. 6, lines 8, 16, 19, 26, 37, 49; col. 7, line 1 through col. 8, lines 4; col. 8, lines 36-52).

59. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of the combination of Shim, Auer, Wu and Flockhart because Flockhart teaching of the service activation rules in the execution list correspond to competitive Web services, comparing the identified service activation rules with at least one service selection rule, and wherein the at least one selection rule comprises a heuristic evaluation of the competitive Web services would improved the integrity of Shim, Auer, Wu's system by providing more appropriate customer treatment for internet service request (col. 2, lines 44-47).

60. As per claims 17, 21, 24, and 37, they are rejected for the same reason as claim 12 above.

61. As per claim 18, Shim teaches wherein said execution evaluation processor invokes at least one of said watchers according to selected service activation rules. (Abstract, lines 1-8, the processor, which is inherent here invokes Web services based on the analysis of the user commands. The watchers are the tasks called when the

service activation rules match a certain user command, and the tasks in turn invoke the Web services. The service activation rules while not expressly described are inherent, because there have to be rules for analyzer to determine which Web services to invoke).

62. As per claim 22, Shim teaches wherein said execution evaluation processor invokes at least one of said watchers according to selected service activation rules (Abstract, lines 1-8, the Web services are scheduled based on the analysis of the user commands, which implies service activation rules and a watcher that invokes a particular Web service when there is a match with the corresponding service activation rule).

Response to Arguments

63. Applicant's arguments with respect to claims 12-13, 17-18, 21-22, and 37-38 have been considered but are moot in view of the new ground(s) of rejection.

64. The Declarations filed on 11/21/2007 under 37 CFR 1.131 has been considered but is ineffective to overcome the Wu and Xie references.

(a) Applicant supporting evidence of Applicant diligence in pursuing the present application is not clear and convincing. Based on the Declaration filed on 09/14/2004, Examiner has summarized summaries the evidence from a date prior to the date of

Strasnick reference to application's filing date as "Summary of Preparation History" below:

Summary of Preparation History:

Dec 13, 2002 submitted disclosure to patent attorney by applicant;

Dec 16, 2002 the disclosure modified;

May 27, 2003 email communicating between applicant and IBM regarding search results;

May 28, 2003 letter from IBM requesting outside counsel to prepare the application;

May 30, 2003 letter from outside counsel confirming receipt of the instruction;

Sept 30, 2003 to Oct 31, 2003 series communications requesting review and final approval of the application drafted by outside counsel.

Examiner noted that a period from May 30, 2003 to Sept 30, 2003, where no evidence is provided as to affirmative acts involving this application preparation.

Diligence must be proven from prior to August 10, 2003 and August 26, 2003 (the filing date of Wu and Xie) until Sept 30, 2003. Based upon the evidence presented, there is an apparent period lacking activity. Therefore the evidence is not persuasive, and thus the rejection is being maintained and made final (See MPEP 2138.06).

(b)The declaration fails to comply with proper execution requirements, specifically the criteria involving non-signing inventors. According to the MPEP, signatures of all the inventors are required in the Declarations, unless the inventor(s) is unavailable to sign (in this case a proof of why the non-signing inventor unavailable to sign must be submitted). The MPEP stated:

715.04 [R-6] Who May Make Affidavit or Declaration; Formal Requirements of Affidavits and Declarations

I. WHO MAY MAKE AFFIDAVIT OR DECLARATION

The following parties may make an affidavit or declaration under 37 CFR 1.131:

- (A) All the inventors of the subject matter claimed.
- (B) An affidavit or declaration by less than all named inventors of an application is accepted where it is shown that less than all named inventors of an application invented the subject matter of the claim or claims under rejection. For example, one of two joint inventors is accepted where it is shown that one of the joint inventors is the sole inventor of the claim or claims under rejection.
- (C) If a petition under 37 CFR 1.47 was granted or the application was accepted under 37 CFR 1.42 or 1.43, the affidavit or declaration may be signed by the 37 CFR 1.47 applicant or the legal representative, where appropriate.
- (D) The assignee or other party in interest when it is not possible to produce the affidavit or declaration of the inventor. *Ex parte Foster*, 1903 C.D. 213, 105 O.G. 261 (Comm'r Pat. 1903).

Affidavits or declarations to overcome a rejection of a claim or claims must be made by the inventor or inventors of the subject matter of the rejected claim(s), a party qualified under 37 CFR 1.42, 1.43, or 1.47, or the assignee or other party in interest when it is not possible to produce the affidavit or declaration of the inventor(s). Thus, where all of the named inventors of a pending application are not inventors of every claim of the application, any affidavit under 37 CFR 1.131 could be signed by only the inventor(s) of the subject matter of the rejected claims.

> Where one or more of the named inventors of the subject matter of the rejected claim(s) (who had originally signed the oath or declaration for patent application under 37 CFR 1.63) is now unavailable to sign an affidavit or declaration under 37 CFR 1.131, the affidavit or declaration under 37 CFR 1.131 may be signed by the remaining joint inventors provided a petition under 37 CFR 1.183 requesting waiver of the signature of the unavailable inventor be submitted with the affidavit or declaration under 37 CFR 1.131. Proof that the non-signing inventor is unavailable or cannot be found similar to the proof required for a petition under 37 CFR 1.47 must be submitted with the petition under 37 CFR 1.183 (see MPEP § 409.03(d)). Petitions under 37 CFR 1.183 are decided by the Office of Petitions (see MPEP § 1002.02(b)).<

Conclusion

65. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO 892).

66. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

67. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

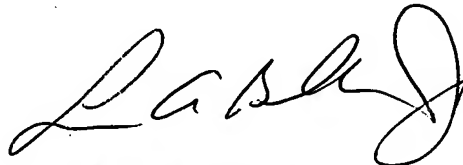
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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68. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer N. To
Examiner
Art Unit 2195

A handwritten signature in black ink, appearing to read "L. Bullock, Jr.", with a stylized flourish at the end.

LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER